

BEHÇET DISEASE – CASE PRESENTATION

Ioan Buraga, Roxana Martin, Adrian Dobrescu, Magda Buraga
“Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

ABSTRACT

Behçet disease is a form of vasculitis that can lead to ulceration and other lesions. The etiology is not well-defined, but it is characterized by inflammation of the blood vessels. There is no specific pathological test for Behçet disease at present. It is diagnosed clinically by specific patterns of symptoms and repeated outbreaks.

Key words: Behçet disease, recurrent aphthous, uveitis

BACKGROUND

Behçet disease is a systemic disorder characterized by recurrent aphthous ulcers and intraocular inflammation. The clinical triad of uveitis with recurrent oral and genital ulcers bears the name of Hulusi Behçet, a Turkish dermatologist who described 3 patients who had this triad.

FREQUENCY

The incidence and prevalence of Behçet disease are highest along the old Silk Road, extending from the Middle East to China.

Turkey has the highest prevalence of Behçet disease, with 420 cases per 100,000 population. The prevalence in Japan, Korea, China, Iran, and Saudi Arabia ranges from 13.5-22 cases per 100,000 population. The prevalence in North America and Europe is much less, with 1 case per 15,000-500,000 population.

MORTALITY/MORBIDITY

- Epidemiology studies have reported that Behçet disease carries an overall mortality rate of up to 16% at 5 years.
- Coronary/pulmonary arterial aneurysm rupture in association with Behçet disease carries a high mortality rate.

- Neurologic involvement has been associated with mortality rates up to 20% at 7-year follow-up in one Turkish study.
- Thrombosis may lead to death.
- CNS involvement can lead to permanent deficits or death.
- Eye involvement can result in blindness.

Race

The prevalence of Behçet disease is highest among Middle Eastern and Japanese persons.

Sex

The sexual prevalence varies by country.

- In the Middle East, Behçet disease is more common among males, with male-to-female ratios of 3.8:1 (Israel), 5.3:1 (Egypt), and 3.4:1 (Turkey). In Germany, Japan, and Brazil, the disease is slightly more common in females. In the United States, Behçet disease is more common in females (5:1 female-to-male ratio).
- Males are more likely to develop severe presentations of Behçet disease. Pulmonary aneurysms, eye involvement, thrombophlebitis, and neurologic disease are all more common in males. However, females are more likely to develop erythema nodosum-like skin lesions.

Author for correspondence:

Ioan Buraga, „Carol Davila“ University of Medicine and Pharmacy, 8 Eroilor Sanitari Blvd., Bucharest, Romania

Age

- Behçet disease is most common among persons aged 20-40 years. Cases that develop before age 25 years are more likely to involve eye disease and active clinical disease.
- The mean age at onset is 25-30 years.

The Behçet's Disease Research Committee of the Ministry of Health and Welfare of Japan first proposed formal diagnostic criteria in 1972. This set of criteria, which has been used throughout the world, classifies disease findings into 4 major criteria and 5 minor criteria. When all 4 major criteria are met, the disease is said to be of the complete type, whereas the incomplete type consists of various combinations of major and minor criteria, with added weight given to ocular disease.

In 1990, The International Study Group for Behçet's Disease proposed a separate set of diagnostic criteria for Behçet disease. Based on these criteria, a diagnosis of Behçet disease requires recurrent oral ulceration and at least 2 additional criteria, including recurrent genital ulcers, ocular lesions, skin lesions, and a positive pathergy test.

CASE PRESENTATION

TF, female, aged 53 years, known with necrotizing sialometaplasia of the mouth, chronic rhinitis with rear drain, dysphagia, diffuse lung scleroemphysema, cervical and thoracic spondylosis, bilateral coxarthrosis without outpatient medical treatment is hospitalized for sores of mouth and white deposits on the surface of the tongue associated with swallowing disorders, fever, inflammation of the eyelids associated with left eye ptosis and decreased visual acuity in the same eyeballs, epigastric pain, weight loss and joint pain in knees and ankles.

Patient suffering began after about a year ago, when hospitalized for oral thrush and swallowing disorders. Is diagnosed with acute nasopharyngitis which follows treatment with antibiotics for two weeks without symptom improvement. The patient is reevaluated and after consultation of infectious disease is diagnosed with throat stomato-mycotic and chronic serous otitis media in the observation. Flucovim and Ketoprofen following treatment and symptoms remitted in a week. Next 3 weeks after the apparent health oral lesions recur. The patient again following the above treatment but without injury to resolve. After three months the patient biopsy is done away palate and the back right pillar and is diagnosed with necrotizing sialometaplasia.

She is treated local applications with glycerine borax, silver nitrate and methylene blue without symptom improvement. After about two months to establish corticotherapy and local applications with methylene blue and silver nitrate with oral lesions remission in about three days. For about two months that the patient has relapsed and remitted under local corticotherapy of mouth. Biopsy is done away with palate and pillars revealing fragments of squamous mucosa with epithelial dysplasia presenting moderate coverage and area of ulceration with underlying granulation tissue, granulomatous diffuse lymphoid infiltrate with numerous eosinophils and neutrophils sites. The patient is hospitalized in a rheumatology clinic where she is diagnosed with rheumatoid syndrome, cervico-thoracic spondylosis and necrotizing sialometaplasia and follow treatment with Movalis 1cp/zi 15mg, 20mg Omez 1cp/zi and Dexamethasone 1/zi briefly without symptom improvement. It made a new oral mucosa biopsy which highlights changes from last pathological investigation. Glucocorticoids and local application going again in the mouth with remission of symptoms. Follow approximately one month after the apparent health reinstall symptoms, so the patient following treatment with Diflucan, and Dexamethasone per os with complete remission of symptoms. Follow health apparently about two months during which the patient following investigations after which highlights sideremia is low, increased fibrinogen, increased C-reactive protein and increased TPHA. Also scraper is made of mouth with HSV-1 and highlight throat swab to highlight the rare colonies of *Candida albicans* yeast sensitivity to Nystatin, Econazol, miconazole, fluconazole, ketoconazole, clotrimazole, Amphotericine B.

Patient again oral thrush and white deposits on the tongue plus this time with inflammation of eyelids ptosis left eye and decreased visual acuity the same eyeballs. Is hospitalized and performing laboratory analysis highlights increased TPHA. The patient is discharged with iron deficiency anemia, luteal serological sequelae diagnosed performing recommended examining VDRL and TPHA in the CSF and CT brain. Following outpatient treatment with azithromycin 500mg 1tb/zi, 1tb/zi Nurofen, Paracetamol and Maltofer 1tb/zi 1cp/zi without improving clinical status.

After about six days the patient presents to the emergency room for fever, mouth sores associated with the white deposits on the tongue, bleeding disorders and swallowing, pain in epigastrium, weight loss (20 kg last year), left retro-orbital headache,

left ptosis, left eye pain, swelling and congestion eyelids left eye (Figure 1), decreased visual acuity left eye and joint pain.



Figure 1. Left ptosis, swelling and congestion eyelids left eye

Clinical examination highlights: Woman with feverish state ($T = 37.4\text{ }^{\circ}\text{C}$), pale skin, oral mucosa with sores and whitish deposits on the tongue (Figure 2), impalpable superficial lymph nodes, fat underrepresented, knee joint pain and ankle mobilization, normal chest complied, without bilateral pulmonary rales superadd, PMI – 5th ics, HR = 120bpm, ringing rhythm without heart or pocket pressure, BP = 140/80mmHg, permeable peripheral arteries bilaterally, abdomen slim mobile with breathing, painful to palpation in the epigastrium, melena looking chairs.

Neurological examination highlights absence of neck stiffness, photomotor reflex present bilaterally, decreased visual acuity left eye, oculomotricity normal, ptosis left eye, swallowing disorders for solids and liquids, DTR exaggerated bilaterally symmetrical, bilateral Hoffmann sign and Trömer,



Figure 2. Patient oral aphthosis and whitish deposits on the tongue evidenced by at least three times in the last year

plantar reflex in flexion, preserved sensitivity. The patient shows signs of inflammation of the eyelids, irritation and conjunctivitis with tearing left eye.

Blood tests highlights: anemic syndrome, low iron levels, nonspecific inflammatory syndrome, negative antigen tests and serology negative except increased TPHA.

ECG examination and radiological lung examination is normal.

Visual evoked potential highlights the optic nerves decreased nerve conduct more pronounced in the left eye. EEG is normal. CT appearance highlights of chronic maxillary sinusitis and orbital soft tissues edema left eye

Ophthalmologic examination highlights anterior uveitis left eye and inflammation of eyelids (Figure 3).



Figure 3. Anterior uveitis

Pathergy test is also performed which highlights a small red papulous the intradermal injection of saline (Figure 4).



Figure 4. Positive pathergy test

The MRI lesions were observed demyelination nature of vasculitis (Figures 5 and 6).

Coronal T2 weighted SE MR image shows bilateral hemispheric sub-cortical lesions (arrowhead points to the right-side lesion). Concomitant bilateral basal ganglia-thalamic lesions are also seen (arrow points to the left lesion).

DIAGNOSIS

History, clinical examination and paraclinical diagnoses made support of: Behcet's disease. They

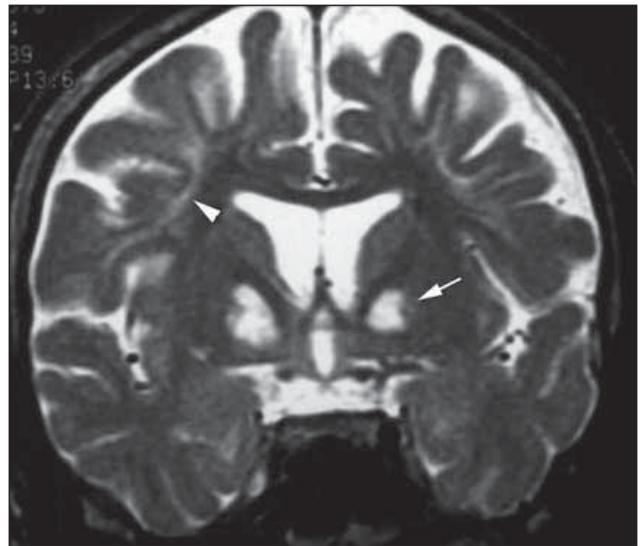


Figure 5. Hemispheric lesions: sub-cortical.

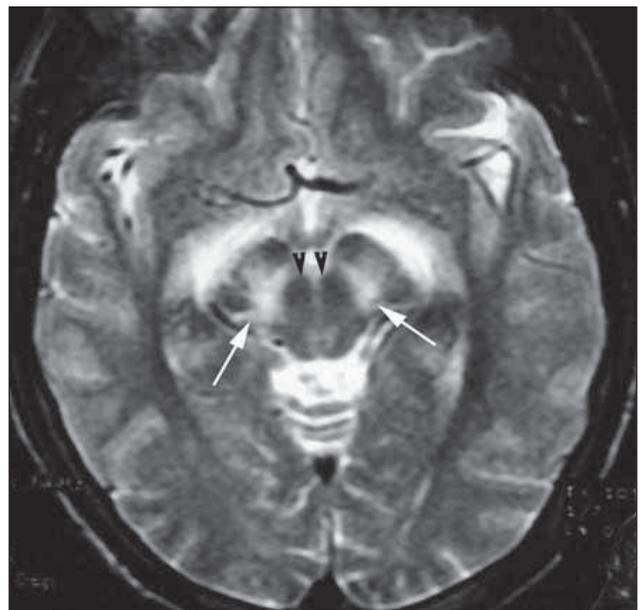


Figure 6. Mid brain lesions: involvement of cerebral peduncles and sparing of red nuclei. Axial T2 weighted SE MR image shows bilateral hyperintense lesions of cerebral peduncles and adjacent regions (arrows).

are sufficient criteria for diagnosis of Behcet's disease.

TREATMENT

Therefore we established treatment with glucocorticoids Solumedrol 250mg/day IV. Administered treatment resolves symptoms in 5 days.

DIFFERENTIAL DIAGNOSIS

1. Chronic stomatitis and mouth disease – characterized by discrete lesions, painful, lasting

- 7-10 days. Larger ulcers may take several weeks or months and may heal with scarring. There are three types: a) minor recurrent mouth ulcers, ~ 80% of cases, discrete lesions, superficial, painful, $\phi < 1$ cm, heal without scarring in 7-10 days. Periodicity is individual. There were long periods of personal delivery and others who are never without ulceration. b) recurrent major disease ulceratii: oval, $\phi > 1$ cm, large and deep, with irregular edges that may conflict. After healing that can take ~ 6 weeks, ulcers leave scars and distortions of the mouth and throat. c) ulcerative herpeticiformis – 5-10% of cases, thrush with $\phi < 1$ mm, with a tendency to group. Can be localized or distributed throughout the oral cavity.
2. Herpes Simplex orolabial – represented by groups of small blisters, often accompanied by erythema and edema. Primary infection may be accompanied by fever, odynophagia, submandibular cervical adenopathy. Blisters break, forming crusts and complete healing takes 7-10 days. Recurrent lesions are often preceded by pain, burning, itching or tingling.
 3. Systemic lupus erythematosus – is a chronic, autoimmune, which can affect different parts of the body, especially skin, joints and kidneys. Besides erythema “in the future, the photosensitivity, 50% of the patients had joint pain as initial symptom in the ankle, elbow, knee, fingers. When affect CNS lupus can occur: headache, fatigue, depression, the problem of view, sudden changes of states. 20% may develop eye damage: eyes red, swollen, flow of tears / dry eyes, light sensitivity, headache or blurred vision. Our patient’s symptoms but is similar to that prevailing appellants mouth ulceration.
 4. Reiter’s syndrome – chronic disease characterized by the association of ocular inflammation, urethral / Digestive and joints. Translates into a clinical diarrhea followed by conjunctivitis, urethritis and finally an arthritis affecting one joint Sacro-iliac especially, but also the hips, knees and elbows. Disease evolves and gives spikes to NSAIDs.
 5. Human immunodeficiency virus – known more stages in the involution of infection:
 - Stage I: free of symptoms or with symptoms that can be found in other infectious or non-communicable diseases: headache, muscle and joint pain, fever, nausea, decreased ap-

petite, swollen glands (symmetric)

- Stage II: asymptomatic except node swelling
- Stage III: presence of symptoms reflecting serious infections without headache, fever, night sweats, fatigue, diarrhea, skin diseases, lesions of the mouth
- Stage IV: symptom: gastrointestinal disease, pulmonary disease, neurological diseases
- Stage V: weight loss, debility pronounced, central nervous system

Despite clinical similarities, the diagnosis can be easily excluded after determination of HIV antibodies, which came out negative in our patient.

6. Amyloidosis – noninfectioasa chronic inflammatory disease in which weakness, weight loss and peripheral edema are the most common symptoms. Deposit of amyloid is found in liver, spleen, kidneys, because of proteinuria, SDR. nephrotic, joints, causing deformities.
7. Antiphospholipid syndrome – Patients have a history of miscarriages or premature birth, vascular thrombosis, valvular vegetation, thrombocytopenia, hemolytic anemia and pulmonary hypertension.
8. Sarcoidosis – cause ocular manifestations, uveitis, chorioretinitis, cutaneous manifestations, nodule, pain, frequent joint manifestations, gastrointestinal events, but asymptomatic liver harm, neurological, myelitis, asymptomatic lymphocytic meningitis and other symptoms.

COMPLICATIONS

Complications of Behcet’s disease may include:

- Memory loss
- Impaired speech
- Impaired balance
- Impaired movement
- Blood clots
- Colitis
- Episcleritis
- Vesiculo-bullous rash
- Oligoclonal bands (CSF)
- Erythema nodosum

PROGNOSIS

Behcet’s disease is a lifelong disorder which proceeds over a long period of time in a series of remissions (lack of disease activity) and exacerbations

tions (periods of active disease). Most people with Behçet's disease can lead normal lives and control their symptoms with proper medicine, rest, and exercise. Doctors can use many medicines to relieve pain, treat symptoms, and prevent complications. When treatment is effective, flares usually become less frequent after 1 or 2 years. Many patients even-

tually enter a period of remission. In some people, however, treatment does not relieve symptoms, and gradually more serious symptoms such as eye disease may occur. Serious symptoms may appear months or years after the first signs of Behçet's disease.

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